AMENDMENTS TO THE CLAIMS:

1. **(Currently Amended)** A method for identifying an agent that modulates NF-κB activity in transcription of a gene in a eukaryotic cell, the method comprising:

contacting a candidate agent with a eukaryotic cell in vitro, wherein the eukaryotic cell comprises detectably labeled RelA**, wherein deacetylation results in release of detectable label from RelA**; and

detecting a level of deacetylated RelA;

wherein detection of **a decrease** ~~an increase~~ in the level of ~~deacetylated~~ **detectably labeled** RelA in the presence of the candidate agent compared to a level of ~~deacetylated~~ **detectably labeled** RelA in the absence of the candidate agent indicates that the agent inhibits activity of NF-κB in gene transcription in the eukaryotic cell.

2.-3. **(Canceled)**

4. **(Previously Presented)** The method of claim 1, wherein said detecting is performed in the presence of histone deacetylase 3 (HDAC3).

5.-6. **(Canceled)**

7. **(Currently Amended)** A method for identifying a substance that inhibits NF-κB activity, comprising testing a substance for activity in **promoting** deacetylation of RelA or **inhibiting** ~~inhibition~~ of RelA acetylation, the method comprising the steps of:

exposing a sample comprising a detectably labeled RelA to a test substance**, wherein deacetylation results in release of detectable label from RelA**;

comparing the level of ~~deacetylated~~ **detectably labeled** RelA in the sample comprising the test substance to the level of ~~deacetylated~~ **detectably labeled** RelA in a sample without the test substance; and

determining whether the level of ~~deacetylated~~ **detectably labeled** RelA ~~is greater~~ in the sample exposed to the test substance **is less** than a level of ~~deacetylated~~ **detectably labeled** RelA in the sample without the test substance;

wherein ~~an increase in deacetylated~~ **a decrease in detectably labeled** RelA in the presence of the test substance indicates the test substance inhibits NF-κB activity.

8. (**Original**) The method according to claim 7, wherein the exposing step includes using an extract of cells, which were treated with an inducer for NF-κB activation, or a fraction of said extract.

9. (**Original**) The method according to claim 7, wherein a cell-free system is used for the exposing step.

10. (**Original**) The method according to claim 9, wherein RelA is bound to a support.

11-18 (**Cancelled**)

19. (**Previously Presented**) The method of claim 1, wherein said contacting is in the presence of a protein or protein complex that acetylates RelA.

20. (**Previously Presented**) The method of claim 19, wherein the protein that acetylates RelA is CBP or p300.

21. (**Previously Presented**) The method of claim 1, wherein RelA is within a eukaryotic cell, which cell contains CBP and p300.

22. (**Previously Presented**) The method of claim 1, wherein said contacting is in the presence of HDAC3 and wherein detection of an increase of deacetylated RelA in the presence of the candidate agent is compared to a level of deacetylated RelA in the absence of the candidate agent.

23. (**Previously Presented**) The method of claim 8, wherein the extract comprises p300 and CBP.

24. (**Previously Presented**) The method of claim 23, wherein the extract comprises HDAC3.

25.-42. **(Canceled)**

43. **(Previously Presented)** A method for identifying an agent that modulates NF-κB activity in transcription of a gene in a eukaryotic cell, the method comprising:

contacting a candidate agent with a eukaryotic cell in vitro,

immunoprecipitating a cell lysate of the eukaryotic cell to immunoprecipitate RelA; and

contacting the immunoprecipitated RelA with an anti-acetylated lysine antibody that binds acetylated RelA to detect a level of acetylated RelA,

wherein detection of a decrease in the level of acetylated RelA in the presence of the candidate agent compared to a level of acetylated RelA in the absence of the candidate agent indicates that the agent inhibits activity of NF-κB in gene transcription in the eukaryotic cell.

44. **(Previously Presented)** The method of claim 43, wherein the eukaryotic cell comprises a recombinant nucleic acid comprising a nucleotide sequence encoding T7-RelA, and wherein the immunoprecipitating is done using an anti-T7 antibody.

45. **(Previously Presented)** The method of claim 43, wherein said detecting is performed in the presence of histone deacetylase 3 (HDAC3).

46. **(Previously Presented)** The method of claim 43, wherein said contacting is in the presence of a protein or protein complex that acetylates RelA.

47. **(Previously Presented)** The method of claim 46, wherein the protein that acetylates RelA is CBP or p300.

48. **(Previously Presented)** The method of claim 43, wherein the eukaryotic cell comprises CBP and p300.